

AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) A stator structure ~~of~~ for a reciprocating motor, said stator structure comprising:

a cylindrical, stacked core ~~formed by~~ having radially stacking a plurality of lamination sheets, wherein each of said lamination sheets extends radially and axially with respect to a longitudinal centerline of said cylindrical, stacked core each having a hanging groove; and

a plurality of hanging grooves, wherein each of said hanging grooves includes a receiving groove and a settling groove being recessed and formed within said receiving groove, and at least one of said hanging grooves is respectively provided for each of said lamination sheets; and

an elastic ring being elastically inserted into and fixed secured within said to the hanging groove grooves for securing said lamination sheets to said cylindrical, stacked core.

2. (CURRENTLY AMENDED) The stator structure ~~of~~ according to claim 1, wherein the hanging grooves ~~of the plurality of lamination sheets are formed of~~ collectively form a ring shape.

3. (CURRENTLY AMENDED) The stator structure ~~of~~ according to claim 1, wherein the hanging grooves are formed in both ~~sides of the cylindrical~~

~~stacked core a first longitudinal end and a second longitudinal end of each lamination sheet of said lamination sheets.~~

4. (CURRENTLY AMENDED) The stator structure of according to claim 1, wherein ~~the hanging groove consists of a~~ each of said receiving groove, ~~whose section grooves~~ has a uniform width, and a each of said settling groove ~~grooves formed to be~~ connected to the receiving groove ~~and to have~~ has a width larger than the width of the receiving groove, ~~to thus form a jaw.~~

5. (CURRENTLY AMENDED) The stator structure of according to claim 1, wherein the elastic ring is formed by ~~winding a~~ wound magnetic wire of having a predetermined length once or a plurality of times to form a circle and a circular shape.

6. (CURRENTLY AMENDED) The stator structure of according to claim 1, wherein the elastic ring is formed by ~~winding a~~ wound non-magnetic wire of having a predetermined length once or a plurality of times to form a circle and a circular shape.

7. (NEW) The stator structure according to claim 5, wherein the stator structure includes at least two elastic rings.

8. (NEW) The stator structure according to claim 6, wherein the stator structure includes at least two elastic rings.

9. (NEW) A reciprocating motor having a stator structure, a winding coil combined with said stator structure, and a moving magnet between an inner core and an outer core of said stator structure, said stator structure comprising:

a cylindrical, stacked core having a plurality of lamination sheets, wherein each of said lamination sheets extends radially and axially with respect to a longitudinal centerline of said cylindrical, stacked core;

a plurality of hanging grooves, wherein each of said hanging grooves includes a receiving groove and a settling groove being recessed and formed within said receiving groove, and at least one of said hanging grooves is respectively provided for each of said lamination sheets; and

at least one elastic ring being elastically inserted into and secured within said hanging grooves for securing said lamination sheets to said cylindrical, stacked core.

10. (NEW) The reciprocating motor according to claim 9, wherein the hanging grooves collectively form a ring shape.

11. (NEW) The reciprocating motor according to claim 9, wherein the hanging grooves are formed in both a first longitudinal end and a second longitudinal end of each lamination sheet of said lamination sheets.

12. (NEW) The reciprocating motor according to claim 9, wherein each of said receiving grooves has a uniform width, and each of said settling grooves connected to the receiving groove has a width larger than the width of the receiving groove.

13. (NEW) The reciprocating motor according to claim 9, wherein the elastic ring is formed by a wound magnetic wire having a predetermined length and a circular shape.

14. (NEW) The reciprocating motor according to claim 9, wherein the elastic ring is formed by a wound non-magnetic wire having a predetermined length and a circular shape.

15. (NEW) The reciprocating motor according to claim 13, wherein the stator structure includes at least two elastic rings.

16. (NEW) The reciprocating motor according to claim 14, wherein the stator structure includes at least two elastic rings.